

We Claim:

1. (Amended) A method for diagnosing glaucoma in a person, which comprises detecting aberrant alternate splice form of the human glucocorticoid receptor (GR β) expression or defects in a GR gene which encodes GR β in a biological sample from said person.

2. The method of Claim 1 wherein GR gene defects are detected by a method selected from the group of assays consisting of: restriction fragment length polymorphism (RFLP), single-stranded conformation polymorphism (SSCP), polymerase chain reaction (PCR), denaturing gradient gel, allele specific oligonucleotide ligation, and allele specific hybridization.

3. (Amended) A method for diagnosing glaucoma in a person, which comprises detecting genetic changes in the GR gene leading to altered GR β expression in a biological sample from said person.

4. (Amended) A method for diagnosing glaucoma in a person, which comprises detecting genetic changes outside the GR gene which lead to altered GR β expression in a biological sample from such person.

5. A method for determining whether an agent is useful for treating glaucoma by determining whether it interacts with GR β or alters the expression of GR β .